

# Population in the News, 2019-2026: Timing, Geography and Tone of Coverage of Population Change, and How It Compares with Research

Fliar BI · Prism Research Layer · Working paper, October 2026 · Dataset and code: [github.com/fliarbi/prism-news-api](https://github.com/fliarbi/prism-news-api) · Licence CC BY-NC 4.0

## Abstract

We measure how human population change was covered in a global news index from January 2019 to July 2026. The record is 42,392 de-duplicated articles about population growth and decline, ageing, fertility and birth rates, depopulation, censuses and population policy. We set that coverage beside 11,216 research papers on the same subject published between 2015 and 2025. Six results stand out:

1. **Timing.** January (11.48%) and July (11.45%) are the busiest months of a typical year, together 22.93% of coverage. July is the month of World Population Day; January is the month of many annual statistical releases.
2. **Attention, not demography.** Population change took a 38.2% smaller share of news in 2020 than in 2019. Its share peaked in July 2021 at 5.58 articles per 10,000. The second-highest month was January 2023 (5.27 per 10,000), the month China reported a fall in its population.
3. **Geography.** East Asia leads. South Korea (6.65), Japan (4.87) and China (3.89) have the most over-represented coverage relative to their share of all news. The United States, the largest source of located articles (29.39%), is under-represented at 0.61. Within India, Andhra Pradesh (3.17), Bihar (2.37) and Tamil Nadu (1.77) lead. Within the United States, Indiana (2.01), Michigan (1.72) and Ohio (1.54) lead.
4. **Shifting attention and tone.** As a share of each country's news, coverage fell 64.7% in China between 2023 and 2025 and, among the eight countries with the most located articles, rose only in the United States, the United Kingdom and India. Coverage is far more negative than national news overall in China, South Korea and Japan, but not in India or Nigeria.
5. **Measurement.** Exclusion patterns aimed at animal populations, clinical fertility, journal abstracts and market reports removed 19.2% of raw matches for population vocabulary. Without them a count of human population coverage would be inflated.
6. **Research.** Papers on population growth, decline, ageing and fertility rose from 1.35 to 2.14 per 10,000 papers between 2015 and 2025, a 1.6-fold increase in share.

## Findings stated for citation

- **F1.** January and July together held 22.93% of a year's population news (2019–2025 average).
- **F2.** Population change took a 38.2% smaller share of news in 2020 than in 2019 (1.73 vs 2.8 per 10,000 articles).
- **F3.** July 2021 was the peak month by share, at 5.58 articles per 10,000.

- **F4.** January 2023, the month China reported a population decline, had the second-highest monthly share, 5.27 per 10,000.
- **F5.** South Korea (6.65), Japan (4.87) and China (3.89) were the most over-represented countries; the United States was at 0.61.
- **F6.** By continent, Oceania (2.16) and Asia (1.72) were over-represented; North America (0.62) was not.
- **F7.** 47.4% of articles were negative in tone, 1.41 times the all-news share; 71.2% were rated critical priority.
- **F8.** Migration patterns and immigration rates appeared in 3.16% of themed articles, 601 times their frequency in all themed news.
- **F9.** Population papers rose 1.6-fold as a share of all papers between 2015 and 2025.
- **F10.** Within India, Andhra Pradesh (3.17), Bihar (2.37) and Tamil Nadu (1.77) had the most over-represented coverage.
- **F11.** Within the United States, Indiana (2.01), Michigan (1.72) and Ohio (1.54) had the most over-represented coverage.
- **F12.** Coverage as a share of China's news fell 64.7% from 2023 to 2025.
- **F13.** Coverage was most negative against the national baseline in China (74.8% vs 27.2%), South Korea and Japan.

## 1. Introduction

Population change is slow. Birth rates, ageing and migration move over decades, and the official record of them arrives in censuses and annual statistics. News is where those statistics meet the public. A new low in the fertility rate, a census result or a government incentive for a third child becomes a story, and the story shapes what readers and policy-makers treat as a problem.

Coverage of population is rarely measured as data. Demographers record population. Bibliometric studies record research. Few sources record attention: how much of the news population change takes, and when, where and in what tone. This paper and its dataset do that. They combine a global news index with research papers, and each comparison uses a denominator, so that growth in the index or in publishing is not mistaken for growth in interest. The companion dataset publishes an article-level sample (10,606 rows) and full coverage tables, so every figure here can be re-derived. The [Prism News API](#) serves the full history.

## 2. Data and methods

**News.** The Prism news index holds articles from outlets worldwide; non-English articles are indexed in English translation. Each article carries its opening text (the first few sentences), a primary location, a graded tone label, an editorial priority rating (1–9), themes, keywords and named organisations. We count unique article identifiers; repeated rows for the same article are removed. When this release was built, 92.88% of the index was readable, so all counts are lower bounds.

**Matching.** The bare word *population* appears in most news without being its subject ("a quarter of the population"), so it is not used. An article is about population change when its opening text contains one of 35 phrases as whole words. They cover growth and decline (*population growth*, *population decline*, *shrinking population*, *depopulation*, *population*

*collapse*), ageing (*ageing population*, *population ageing*), fertility (*fertility rate*, *birth rate*, *total fertility*, *baby bust*), statistics (*population census*, *World Population Prospects*) and policy (*population control*, *population policy*, *one-child policy*, *pronatalist*, *demographic dividend*). Four families of matches are excluded:

- openings that name animals, livestock, pets, plants, cells or microbes (wildlife population decline, stray-dog population control, poultry depopulation);
- journal abstracts, recognised by their structured headings;
- clinical fertility reports (IVF, embryos, sperm counts);
- market-research releases.

Together these removed 10,090 of 52,482 raw matches (19.2%). One reviewer read 40 randomly drawn matched openings. 38 used the terms for human population (precision 95%), and in 24 (60%) population change was the main subject. The two misses were a figurative "overpopulation" of players in a football squad and "population control" meaning a party's electoral reach. *Population growth* is the most frequent term (25.1% of articles), and it is often a passing driver in stories about housing, water or health care. Such articles are relevant but not primary.

**Measures.** Coverage over time is expressed per 10,000 articles in the index that month or year, because the index grew from 11,807,177 articles in 2019 to 26,990,006 in 2025. Seasonality uses each year's within-year month shares, averaged over the complete years 2019–2025. Geography, tone, priority and themes use January 2023 – July 2026. Geography is expressed as lift: a country's share of matched articles divided by its share of all located articles. States are measured against their own country's news. Place tags derived from ordinary words ("Congress", "Earth", "Winter", "Cloud", "Mobile", "Hurricane"; 714 words in all) were treated as unlocated in every location field, which removed 15.3% of city-tagged articles.

**Research and patents.** Research papers are de-duplicated articles and reviews (2000–2025) with a population-change term in the title. Repository deposits and the clinical and animal senses of the terms are excluded. Patent families (2015–2024) are matched on population-statistics terms in the title and counted once per filing office.

## 3. Results

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### 3.1 How much and when

The index holds 42,392 articles about population change from January 2019 to July 2026. Raw counts rose from 3,301 in 2019 to 8,416 in 2025. The share of all news rose less: 2.8 per 10,000 in 2019, 3.42 in 2024 and 3.12 in 2025, so 2025 stands 1.11 times above 2019 (Table 1). The low point was 2020, at 1.73 per 10,000. That is 38.2% below 2019, in the first year of the COVID-19 pandemic; the index does not show why. By 2024 the share was 1.98 times the 2020 level.

| Year | Matched articles | All articles in index | Per 10,000 |
|------|------------------|-----------------------|------------|
| 2019 | 3,301            | 11,807,177            | 2.8        |
| 2020 | 2,803            | 16,230,014            | 1.73       |
| 2021 | 4,710            | 17,281,220            | 2.73       |
| 2022 | 4,811            | 19,115,515            | 2.52       |
| 2023 | 6,289            | 20,484,506            | 3.07       |
| 2024 | 7,978            | 23,311,896            | 3.42       |
| 2025 | 8,416            | 26,990,006            | 3.12       |

**Table 1.** Articles about population change per year and as a share of the index. 2026 (January-July) is partial and omitted.

The highest monthly share was July 2021, at 5.58 per 10,000 (Figure 1). That was the month of World Population Day and of a draft population control bill in the Indian state of Uttar Pradesh. The second-highest share came in January 2023 (5.27 per 10,000; 1,037 articles), the month China reported a fall in its population. Other high months are July 2022 and July 2024 (both 4.21) and July 2025 (4.06).

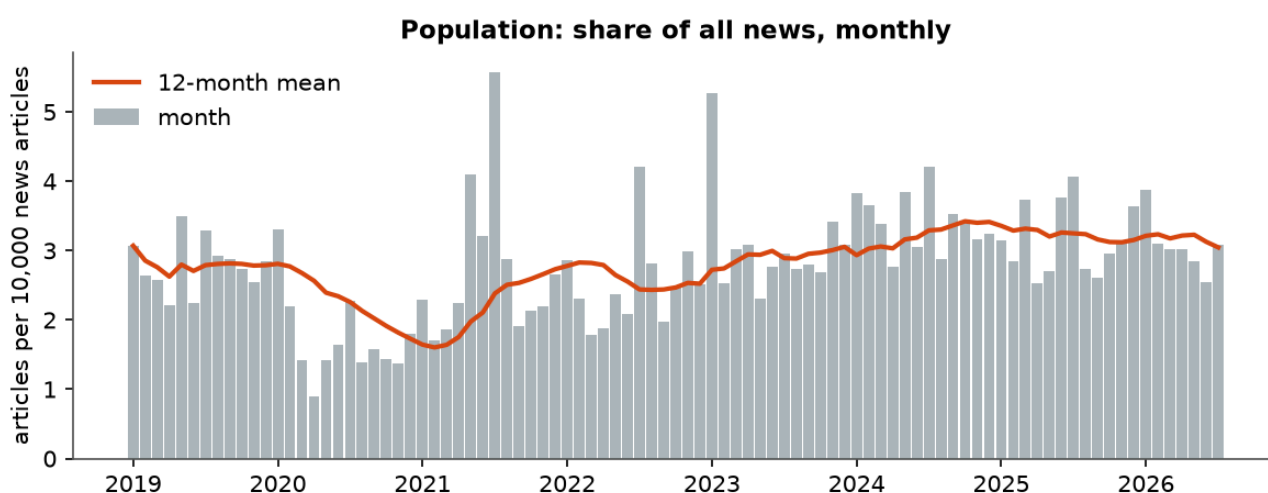


**Figure 1.** Coverage of population change as articles per 10,000 news articles, monthly, January 2019 – July 2026. Bars are months; the line is the 12-month mean.

Coverage has two seasonal peaks (Figure 2). January holds 11.48% and July 11.45% of a typical year's articles, together 22.93%, against one-sixth for an even spread. April is the quietest month (6.37%). The July peak is the month of World Population Day (11 July). The January peak is the month in which many statistics offices publish the previous year's births and population totals. Neither link is tested here; both are coincidences of timing.

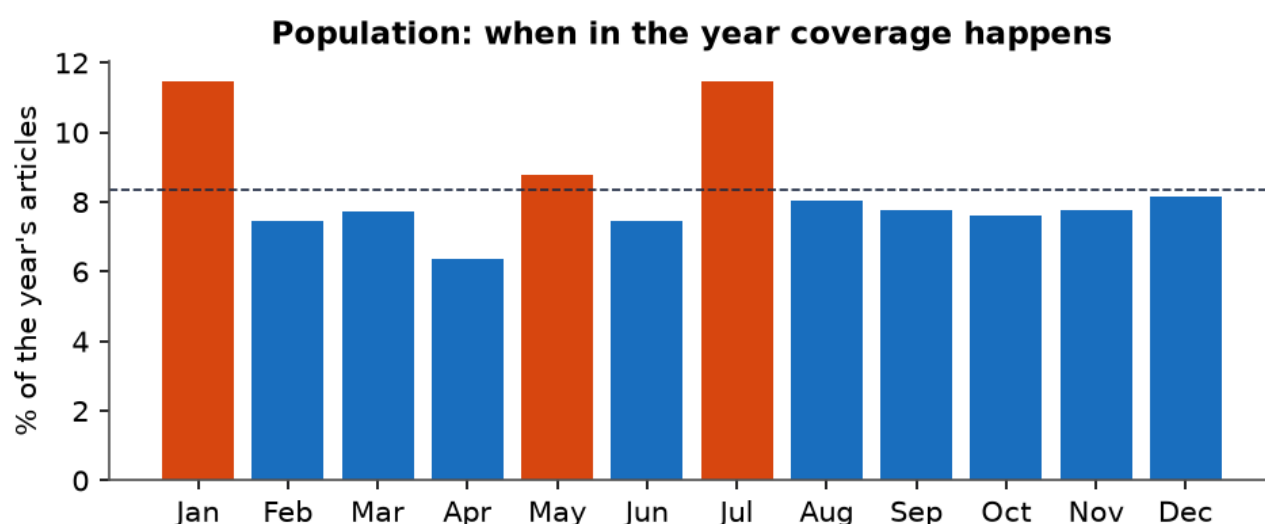


**Figure 2.** Share of each year's articles published in each month, averaged over 2019–2025. Dashed line = an even spread across the twelve months.

### 3.2 Where

Between January 2023 and July 2026, 13,487 articles carried a primary location. The United States holds the largest raw share (29.39%), but its lift is 0.61: population change takes a smaller share of American news than of news overall. India's share (12.71%) comes with a lift of 0.96, close to its weight in the index. The most over-represented countries are in East Asia: South Korea (6.65), Japan (4.87) and China (3.89), followed by Singapore (3.3) (Table 2, Figure 3). Indonesia's lift (3.36) is not reported: most of its sampled articles are copies of one 2025 market report on vegetable oils that names population growth as a demand driver.

| Country        | Located articles | Share % | Lift vs all news |
|----------------|------------------|---------|------------------|
| United States  | 3,964            | 29.39   | 0.61             |
| India          | 1,714            | 12.71   | 0.96             |
| China          | 1,380            | 10.23   | 3.89             |
| Japan          | 698              | 5.18    | 4.87             |
| Australia      | 640              | 4.75    | 2.21             |
| South Korea    | 538              | 3.99    | 6.65             |
| United Kingdom | 507              | 3.76    | 0.64             |
| Singapore      | 396              | 2.94    | 3.3              |
| Canada         | 370              | 2.74    | 1.28             |
| Nigeria        | 236              | 1.75    | 1.28             |
| Russia         | 206              | 1.53    | 2.03             |
| Italy          | 198              | 1.47    | 1.52             |
| France         | 168              | 1.25    | 0.63             |
| New Zealand    | 165              | 1.22    | 1.89             |

**Table 2.** The fourteen countries with the most located articles about population change, January 2023 – July 2026, with lift against all located news.

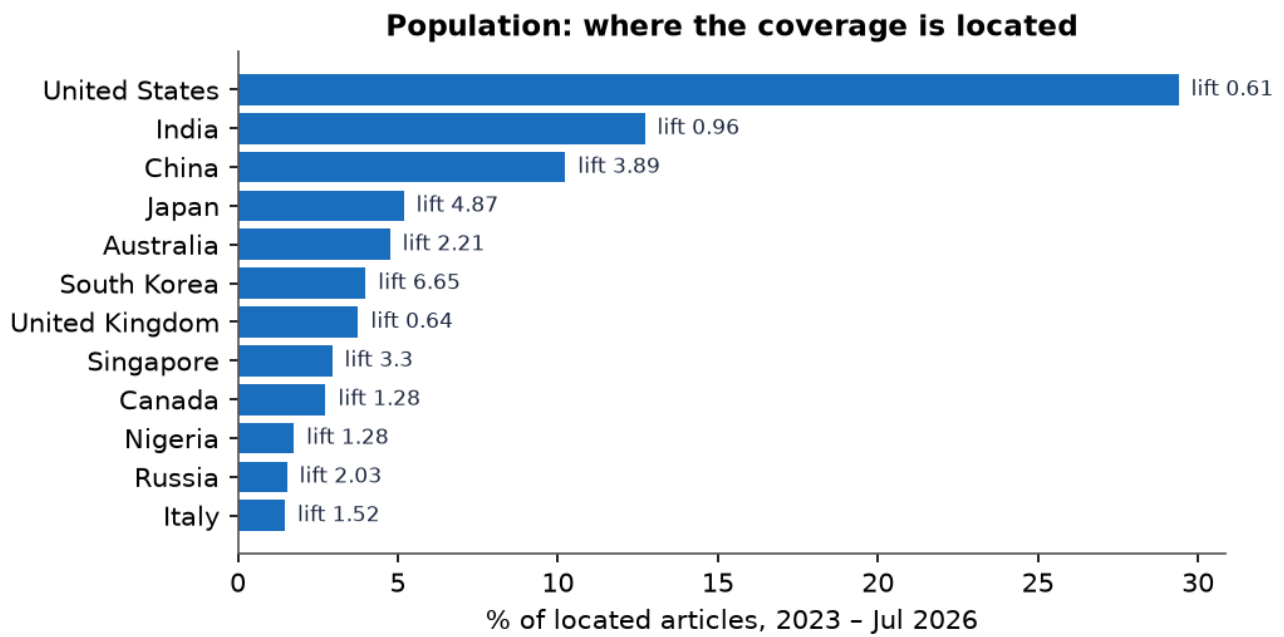


**Figure 3.** Leading countries by share of located articles, 2023 – Jul 2026, labelled with lift against all located news.

### 3.3 Geo intelligence: continents, states and shifting attention

The world map (Figure 4) shows the pattern at a glance. Population change is over-represented in the news of East Asia, Singapore, Oceania and Russia, and under-represented in the United States, the United Kingdom, France and Germany. By continent, Oceania (2.16), Asia (1.72) and Africa (1.27) are over-represented, while Europe (0.89), North America (0.62) and South America (0.4) are not (Figure 7, left). South America has only 95 located articles, so its lift is uncertain.

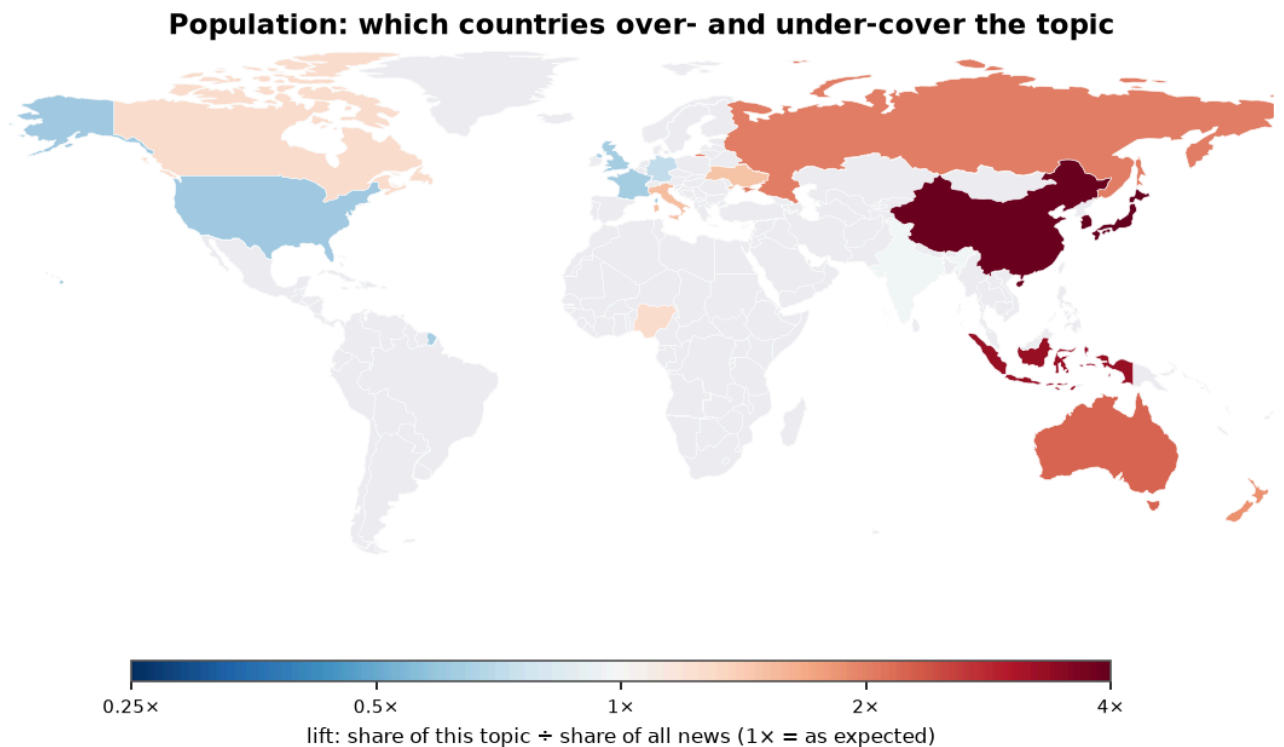


**Figure 4.** Lift of each country's share of located articles about population change, January 2023 – July 2026 (red = over-represented, blue = under-represented, grey = too few articles). India is drawn with its official outline.

Within countries, the counts are smaller and the text names only states with at least 50 articles (Table 3). In India, 1,051 articles carried a state. Measured against each state's

share of Indian news, Andhra Pradesh (3.17), Bihar (2.37) and Tamil Nadu (1.77) are the most over-represented. Uttar Pradesh (0.67) and Maharashtra (0.71) are under-represented despite large article counts, and Delhi (0.84) and Karnataka (1.01) are close to their weight (Figure 5). In the United States, 2,892 articles carried a state. Indiana (2.01), Michigan (1.72) and Ohio (1.54) lead by lift, followed by Texas (1.44) and North Carolina (1.39). New Jersey (0.13) and Pennsylvania (0.59) are far below their weight in American news (Figure 6). Missouri, Arizona and Oregon, which passed the 50-article threshold before place tags from ordinary words were removed, now fall below it.

| India: state   | Articles | Lift | United States: state | Articles | Lift |
|----------------|----------|------|----------------------|----------|------|
| Andhra Pradesh | 76       | 3.17 | Indiana              | 80       | 2.01 |
| Bihar          | 119      | 2.37 | Michigan             | 116      | 1.72 |
| Tamil Nadu     | 93       | 1.77 | Ohio                 | 95       | 1.54 |
| Karnataka      | 59       | 1.01 | Texas                | 246      | 1.44 |
| Delhi          | 115      | 0.84 | North Carolina       | 64       | 1.39 |
| Maharashtra    | 118      | 0.71 | Colorado             | 74       | 1.32 |
| Uttar Pradesh  | 89       | 0.67 | Pennsylvania         | 102      | 0.59 |
|                |          |      | New Jersey           | 73       | 0.13 |

**Table 3.** States with the highest and lowest lift for coverage of population change, January 2023 – July 2026, among states with at least 50 located articles. Lift = the state's share of the country's located articles ÷ its share of all located news from that country.

#### Population: states of India by lift

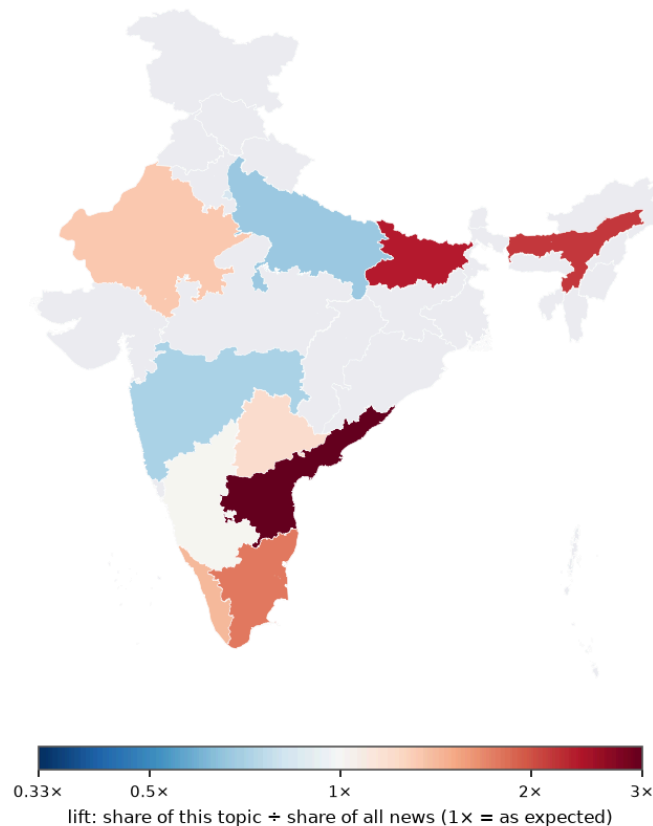


**Figure 5.** Lift of each Indian state's share of located articles about population change against its share of all located Indian news, January 2023 – July 2026. Official outline; Ladakh is drawn within Jammu and Kashmir in the boundary file used.

## Population: states of United States by lift

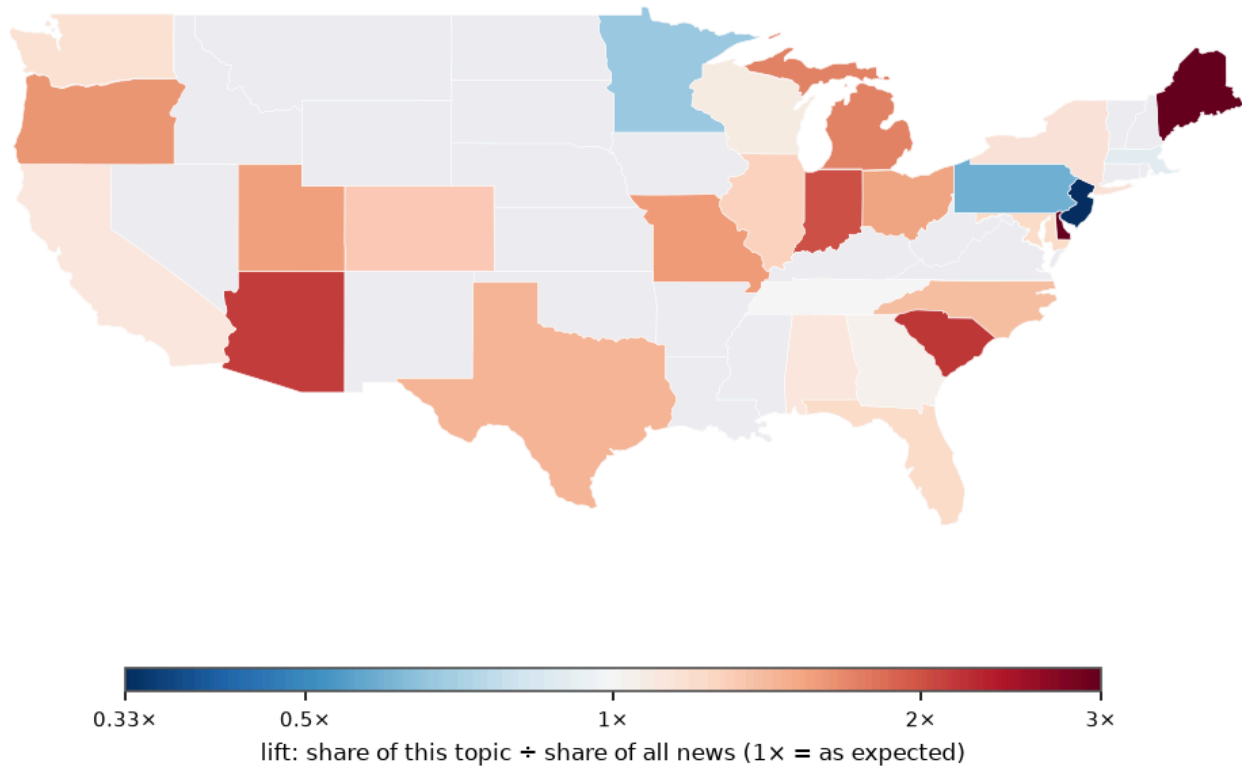


**Figure 6.** Lift of each US state's share of located articles about population change against its share of all located US news, January 2023 – July 2026.

Attention also moves between countries from year to year (Figure 7, right). Measured as articles per 10,000 of each country's located news, China fell from 23.73 in 2023 to 8.37 in 2025, a 64.7% fall from the year of its reported population decline. Among the eight countries with the most located articles, Japan fell from 20.84 to 12.99, Australia from 8.82 to 5.04, Singapore from 11.06 to 9.33 and South Korea from 24.08 to 19.61. Attention rose in the United States (1.73 to 2.35), the United Kingdom (1.81 to 2.22) and India (3.14 to 3.51).

Tone differs by country once each country's own baseline is taken into account (Table 4). Coverage of population change is far more negative than national news overall in China (74.8% negative against 27.2%, a gap of 47.6 points), South Korea (67.1% against 25.0%, 42.1 points) and Japan (63.8% against 23.3%, 40.5 points). Russia has the highest negative share (87.9%), but its news is negative overall (72.1%). In India the share (40.6%) is close to the national baseline (41.2%). In Nigeria it is 10.4 points below it (34.0% against 44.4%).

| Country        | Labelled articles | Negative % (topic) | Negative % (country's news) |
|----------------|-------------------|--------------------|-----------------------------|
| China          | 1,380             | 74.8               | 27.2                        |
| South Korea    | 538               | 67.1               | 25.0                        |
| Japan          | 698               | 63.8               | 23.3                        |
| United Kingdom | 507               | 62.7               | 36.9                        |
| Singapore      | 396               | 49.0               | 24.5                        |
| United States  | 3,959             | 54.6               | 33.1                        |
| Canada         | 369               | 48.5               | 27.1                        |
| Russia         | 206               | 87.9               | 72.1                        |
| Australia      | 639               | 50.1               | 38.4                        |
| India          | 1,710             | 40.6               | 41.2                        |
| Nigeria        | 235               | 34.0               | 44.4                        |

**Table 4.** Negative share of articles about population change by country, against the negative share of all news from that country, January 2023 – July 2026.

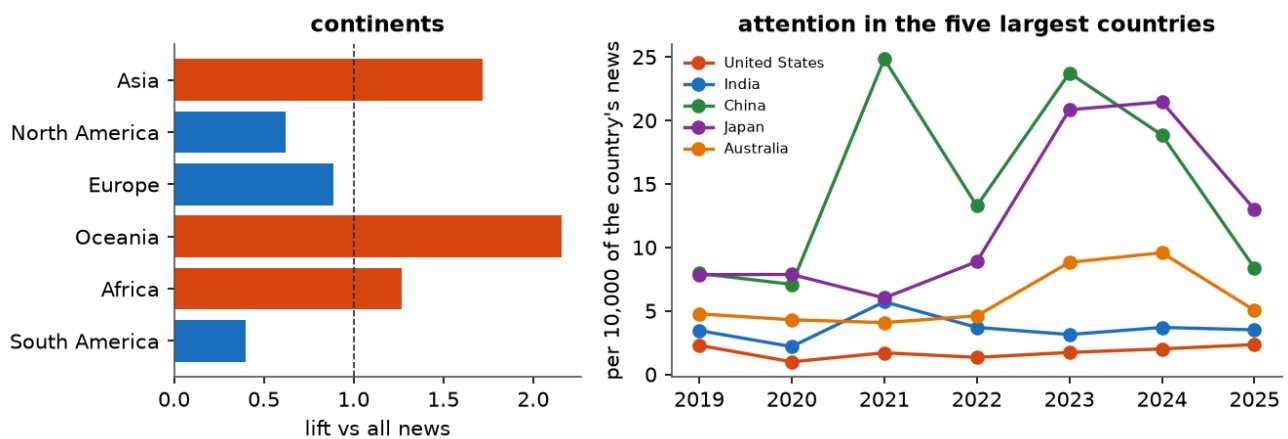


**Figure 7.** Left: lift by continent, January 2023 – July 2026. Right: articles per 10,000 of each country's located news, 2019–2025, for the five countries with the most articles.

### 3.4 Tone, urgency and themes

Coverage of population change is more negative and more urgent than news in general (Figure 8). Among articles with a tone label, 47.4% are negative, against 33.6% across the index (1.41 times). Positive articles are still common (49.4%). Editorial priority puts 71.2% of articles at critical level (7 or higher), against 42.6% of all news (1.67 times).

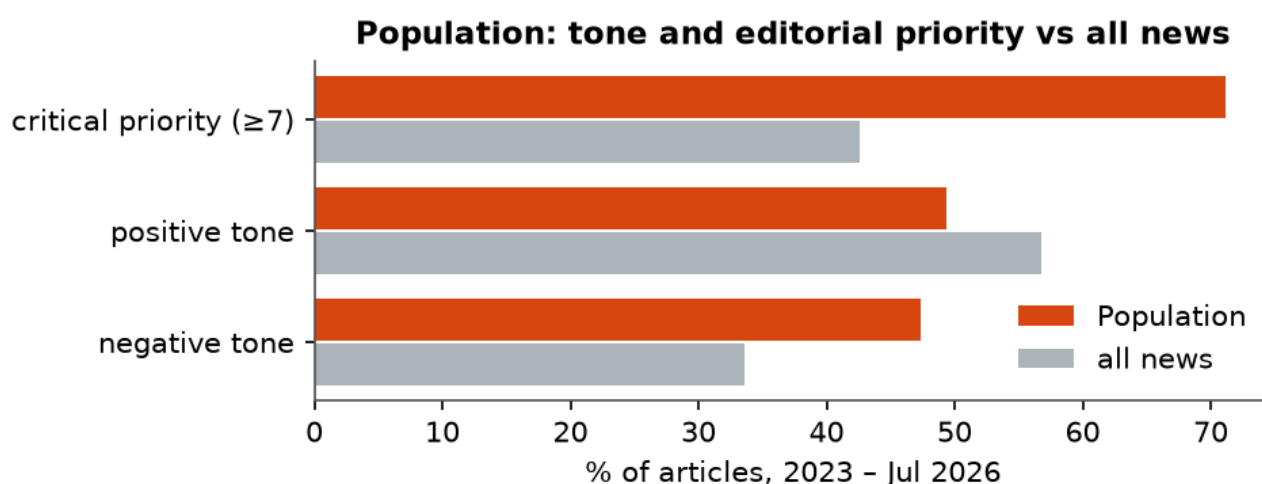


**Figure 8.** Tone and the share rated critical priority, articles about population change vs all news, 2023 – Jul 2026.

Themes show what the stories are about (Table 5). Birth rates and fertility trends are the most specific theme (11.9% of themed articles). Migration patterns and immigration rates appear in 3.16%, 601 times their rate in all themed news, and internal migration in 3.01%. Family economic hardship is common (6.54%) but less specific to the topic.

| Theme                                             | Articles | Share % | Lift    |
|---------------------------------------------------|----------|---------|---------|
| birth rates and fertility trends                  | 1,589    | 11.9    | 1617.15 |
| historical population growth and decline trends   | 401      | 3.0     | 1258.66 |
| globalization effects on population dynamics      | 287      | 2.15    | 932.22  |
| aging population and elderly care trends          | 390      | 2.92    | 913.13  |
| marriage and divorce rate statistics              | 186      | 1.39    | 821.25  |
| migration patterns and immigration rates          | 422      | 3.16    | 601.0   |
| population density and geographic distribution    | 219      | 1.64    | 579.53  |
| internal migration and regional population shifts | 402      | 3.01    | 560.68  |

**Table 5.** Themes most specific to coverage of population change (lift against all themed news), January 2023 – July 2026.

The organisations named most often include statistical and international bodies: the US Census Bureau (395 articles), the OECD (369), the UN Population Fund (326) and the World Bank (235). The organisation list also contains tagging errors, so it is not used for findings.

### 3.5 Research attention and invention

Research on population change grew faster than the scientific literature. Papers with a population-change term in the title rose from 1.35 per 10,000 papers in 2015 to 2.14 in 2025, a 1.6-fold increase in share, while the total literature in the corpus grew by a factor of 1.0 over the same years. Between 2015 and 2025, 11,216 such papers were published. Most of the rise came after 2022 (1.53 per 10,000 in 2022, 1.76 in 2023, 1.97 in 2024). The most-cited work includes accounts of the second demographic transition [1, 2], the economic implications of population ageing [3] and global trends in population growth [4]. Others link ageing to health-care demand [5, 6] or describe ageing in a single country [7].

News attention and research attention both rose from 2022 to 2024 but diverged in other years (Figure 9). Research share was nearly flat from 2015 to 2021, while news share fell in 2020 and recovered in 2021. In 2025 research share rose again while news share fell.

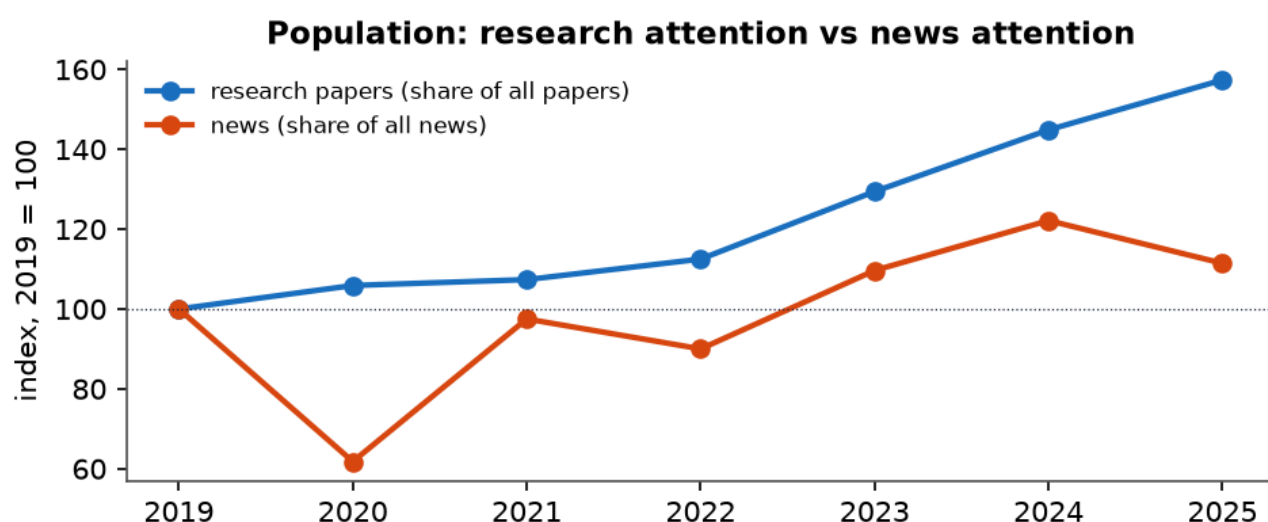


**Figure 9.** Research papers with population-change terms in the title (share of all papers) and news about population change (share of all news), each indexed to 2019 = 100.

Patents are a minor record for this topic. Only 116 patent families published between 2015 and 2024 carry population-statistics terms in their titles, most of them generic data-processing inventions (G06F and G06Q, 28 families each). China's office holds 62.9% of them and the United States 21.6% (Figure 10). No finding is drawn from them.

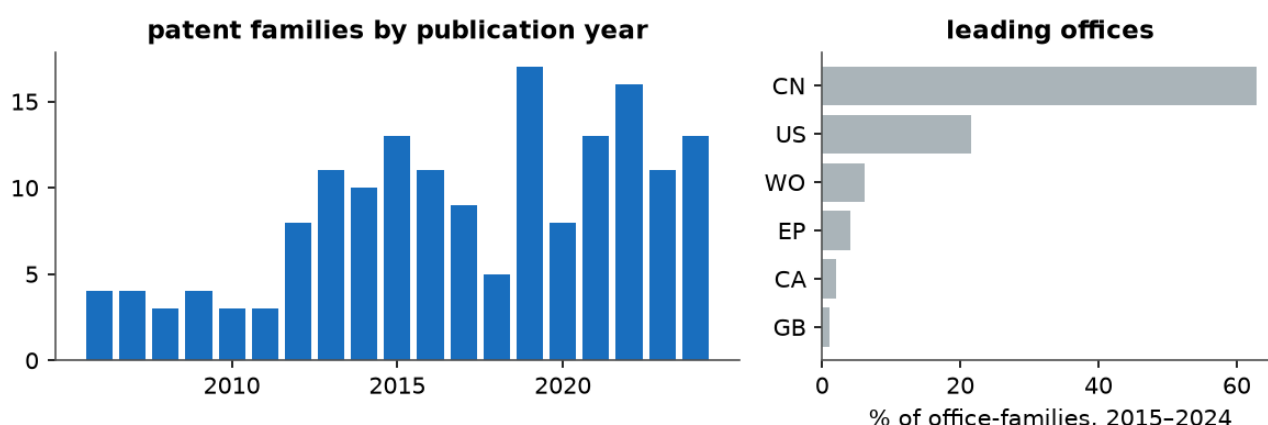


**Figure 10.** Patent families with population-statistics terms in the title, by publication year (left), and the leading filing offices, 2015-2024 (right).

## 4. Discussion

Three points matter for anyone who uses news as a record of population change. First, coverage measures attention. The 2020 trough, the July peaks and the January 2023 count reflect the news calendar and particular announcements, not the pace of demographic change. They are timings, and the index does not record why an article was written. Second, raw shares mislead. The United States leads in raw terms but is under-represented relative to its weight in the index. In the countries where population takes the largest share of news, South Korea, Japan and China, coverage is also far more negative than their news overall. In India and Nigeria coverage is no more negative than national news. This dataset does not test whether these differences follow national demographic trends. Third, keyword searches return much that is not about people: exclusion patterns for animals, clinics, abstracts and market reports removed about a fifth of raw matches.

The geography within countries is less settled. In India, Andhra Pradesh leads, followed by Bihar and Tamil Nadu, while Uttar Pradesh and Maharashtra are under-represented. In the

United States the leading states (Indiana, Michigan and Ohio) are in the Midwest. Removing place tags derived from ordinary words changed which US states pass the 50-article threshold. State counts are small, so these lifts are a starting point for local study, not a ranking. The dataset lets researchers link coverage to official statistics, for example to test whether a census release or a fertility-rate record is followed by a rise in coverage in the same country.

## 5. Limitations

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- **Index availability.** 92.88% of the index was readable at build time, so counts are lower bounds. Shares and lifts are less affected, because the missing part is spread across topics.
- **Coverage after May 2026.** The index thins after May 2026, so 2026 (January–July) is partial and is excluded from year comparisons.
- **Matching.** Matching uses the article opening and a fixed phrase list. Articles that name population change only later are missed, 5% of matches are not about human population, and 40% mention it in passing. The exclusion of openings that name animals or plants also removes some human-population stories that mention forests, crops or pets. Research abstracts without structured headings still pass the filter: 4 of the 40 hand-checked openings were journal abstracts that use the terms in the human sense.
- **Machine labels.** Location, tone, priority and themes are machine-labelled. The city field is noisy and is not analysed. The organisation field contains tagging errors.
- **Ordinary-word place tags.** Place tags derived from ordinary words ("Congress", "Earth", "Winter", "Cloud", "Mobile", "Hurricane"; 714 words) were treated as unlocated in every location field, which removed 15.3% of city-tagged articles. Some genuine places that share a name with such words are lost.
- **Small state counts.** The state lifts named in the text rest on 73 to 246 articles per state.
- **Outlet mix.** The index over-represents English-language outlets, which shapes geography and tone.
- **Research and patent counts.** These match titles only. Some ecological papers on species decline remain in the research count. Patent counts are too small for findings.

## Data availability

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The dataset (article sample, monthly and country tables, state tables, research and patent tables, all metrics) is released under CC BY-NC 4.0 with this paper. The sample holds 10,606 of 42,378 matched articles to 31 July 2026. Full article text, headlines, publishers, later articles and other topics are served by the Prism News API: <https://github.com/fliarbi/prism-news-api> (base URL <https://radar-api.fliarbi.com/news>). A worked query: `prism-news trends "fertility rate" --since 2019-01-01 --until 2026-07-31 --granularity monthly`.

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